

Sub A1

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ABSTRACT OF THE DISCLOSURE

As and methods are described for digital subscriber loop repeaters, including transforming a digital subscriber loop signal, and increasing a gain of the digital subscriber loop signal, and increasing a gain of the digital subscriber loop signal with a digital subscriber loop repeater. The repeaters are described in various stages because DSL can be provided over various types of loops.

A method of transforming a digital subscriber loop signal includes providing the digital subscriber loop signal, and increasing a gain of the digital subscriber loop signal with a digital subscriber loop repeater. The systems and methods provide advantages because DSL can be provided over long loops and/or over coil loaded loops.

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